

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/017, 471A

Source: OIPK

Date Processed by STIC: 3/14/2003

# ***ENTERED***



OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003 *lmc*  
TIME: 11:06:00

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw

```

3 <110> APPLICANT: Takano, Eriko
4     Bibb, Mervyn
6 <120> TITLE OF INVENTION: Antibiotic Production
8 <130> FILE REFERENCE: 0380-P02329US1
10 <140> CURRENT APPLICATION NUMBER: US 10/017,471A
11 <141> CURRENT FILING DATE: 2001-10-23
13 <150> PRIOR APPLICATION NUMBER: US 60/242,561
14 <151> PRIOR FILING DATE: 2000-10-23
16 <160> NUMBER OF SEQ ID NOS: 19
18 <170> SOFTWARE: PatentIn Ver. 2.1
20 <210> SEQ ID NO: 1
21 <211> LENGTH: 18
22 <212> TYPE: DNA
23 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
27     oligonucleotide
29 <400> SEQUENCE: 1
30 gaccacgtsc csggcatg                                18
33 <210> SEQ ID NO: 2
34 <211> LENGTH: 24
35 <212> TYPE: DNA
36 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
40     oligonucleotide
42 <400> SEQUENCE: 2
43 gtcctgstgg ccsgtsacsc gsac                            24
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 22
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
53     oligonucleotide
55 <400> SEQUENCE: 3
56 gccagcaggt gggcgacctg ac                            22
59 <210> SEQ ID NO: 4
60 <211> LENGTH: 25
61 <212> TYPE: DNA
62 <213> ORGANISM: Artificial Sequence
64 <220> FEATURE:
65 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003 *Am*  
TIME: 11:06:00

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw

```

66     oligonucleotide
68 <400> SEQUENCE: 4
69 gatcgcccg tctgtgttg ccatg                25
72 <210> SEQ ID NO: 5
73 <211> LENGTH: 24
74 <212> TYPE: DNA
75 <213> ORGANISM: Artificial Sequence
77 <220> FEATURE:
78 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
79     oligonucleotide
81 <400> SEQUENCE: 5
82 tatccagctg accgggaacg cgtc                24
85 <210> SEQ ID NO: 6
86 <211> LENGTH: 24
87 <212> TYPE: DNA
88 <213> ORGANISM: Artificial Sequence
90 <220> FEATURE:
91 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
92     oligonucleotide
94 <400> SEQUENCE: 6
95 atcgcccggt cctgtgttg catg                24
98 <210> SEQ ID NO: 7
99 <211> LENGTH: 22
100 <212> TYPE: DNA
101 <213> ORGANISM: Artificial Sequence
103 <220> FEATURE:
104 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
105     oligonucleotide
107 <400> SEQUENCE: 7
108 aagtagaggg ctcccttggt ca                22
111 <210> SEQ ID NO: 8
112 <211> LENGTH: 22
113 <212> TYPE: DNA
114 <213> ORGANISM: Artificial Sequence
116 <220> FEATURE:
117 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
118     oligonucleotide
120 <400> SEQUENCE: 8
121 caaaactact gcttcgggca tg                22
124 <210> SEQ ID NO: 9
125 <211> LENGTH: 22
126 <212> TYPE: DNA
127 <213> ORGANISM: Artificial Sequence
129 <220> FEATURE:
130 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
131     oligonucleotide
133 <400> SEQUENCE: 9
134 ctgcaccctg gtccggtgga ca                22
137 <210> SEQ ID NO: 10

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003  
TIME: 11:06:00

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw

```

138 <211> LENGTH: 24
139 <212> TYPE: DNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
144     oligonucleotide
146 <400> SEQUENCE: 10
147 atcgcccggt cctgcttggc catg                24
150 <210> SEQ ID NO: 11
151 <211> LENGTH: 31
152 <212> TYPE: DNA
153 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic
157     oligonucleotide
159 <400> SEQUENCE: 11
160 catctgcagc gtgatcgtgg cagcttggta g        31
163 <210> SEQ ID NO: 12
164 <211> LENGTH: 401
165 <212> TYPE: DNA
166 <213> ORGANISM: Streptomyces coelicolor
168 <400> SEQUENCE: 12
169 gggcaggacg gcggtgaccg agaaccggtc accgcccttc ggtatccagc tgaccgggaa 60
170 cgcgtcctgc accctgggcc ggtggacaag cgccatcgga accggcaatg cggtttggtc 120
171 gatcgagttg gcatcgagac cagaattgat caaaactact gcttcgggca tgggtccccc 180
172 ccaggaatca tgtgatgccg agctgttctg tatgcgcgaa cgttaagata cagactgagc 240
173 ggtttttttt ctatccttcc cgggggagac atgaacaagg aggcaggcat ggccaagcag 300
174 gaccgggcga tccgcacgcg gcagacgata ctggacgccg cggcgcaggc cttcgagaag 360
175 cagggtacc aaagtgccac gatcacggag atcctcaagg t        401
178 <210> SEQ ID NO: 13
179 <211> LENGTH: 401
180 <212> TYPE: DNA
181 <213> ORGANISM: Streptomyces coelicolor
183 <400> SEQUENCE: 13
184 accttgagga tctccgtgat cgtggcagct tggtagccct gcttctcgaa gacctgcgcc 60
185 gcggcggtcc ggatcgctct cgcgtgcggt atcgcccggt cctgcttggc catgcctgcc 120
186 tccttggttc tgttccccc gggaaggata gaaaaaaaaac cgctcagttc gtatcttaac 180
187 gttcgcgcac acagaacagc tcggcatcac atgattcctg ggggggaccc atgccgaag 240
188 cagtagtttt gatcaattct gcgtccgatg ccaactcgat cgaacaaacc gcattgccgg 300
189 ttccgatggc gcttggtccac cggaccaggg tgcaggacgc gttcccggtc agctggatac 360
190 cgaagggcgg tgaccgggtc tcggtcaccg ccgtcctgcc c        401
193 <210> SEQ ID NO: 14
194 <211> LENGTH: 57
195 <212> TYPE: PRT
196 <213> ORGANISM: Streptomyces coelicolor
198 <400> SEQUENCE: 14
199 Met Pro Glu Ala Val Val Leu Ile Asn Ser Ala Ser Asp Ala Asn Ser
200   1           5           10           15
202 Ile Glu Gln Thr Ala Leu Pro Val Pro Met Ala Leu Val His Arg Thr

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003 *Amc*  
TIME: 11:06:00

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw

```

203          20          25          30
205 Arg Val Gln Asp Ala Phe Pro Val Ser Trp Ile Pro Lys Gly Gly Asp
206          35          40          45
208 Arg Phe Ser Val Thr Ala Val Leu Pro
209          50          55
212 <210> SEQ ID NO: 15
213 <211> LENGTH: 37
214 <212> TYPE: PRT
215 <213> ORGANISM: Streptomyces coelicolor
217 <400> SEQUENCE: 15
218 Met Ala Lys Gln Asp Arg Ala Ile Arg Thr Arg Gln Thr Ile Leu Asp
219 1          5          10          15
221 Ala Ala Ala Gln Val Phe Glu Lys Gln Gly Tyr Gln Ala Ala Thr Ile
222          20          25          30
224 Thr Glu Ile Leu Lys
225          35
228 <210> SEQ ID NO: 16
229 <211> LENGTH: 215
230 <212> TYPE: PRT
231 <213> ORGANISM: Streptomyces coelicolor
233 <400> SEQUENCE: 16
234 Met Ala Lys Gln Asp Arg Ala Ile Arg Thr Arg Gln Thr Ile Leu Asp
235 1          5          10          15
237 Ala Ala Ala Gln Val Phe Glu Lys Gln Gly Tyr Gln Ala Ala Thr Ile
238          20          25          30
240 Thr Glu Ile Leu Lys Val Ala Gly Val Thr Lys Gly Ala Leu Tyr Phe
241          35          40          45
243 His Phe Gln Ser Lys Glu Glu Leu Ala Leu Gly Val Phe Asp Ala Gln
244          50          55          60
246 Glu Pro Pro Gln Ala Val Pro Glu Gln Pro Leu Arg Leu Gln Glu Leu
247 65          70          75          80
249 Ile Asp Met Gly Met Leu Phe Cys His Arg Leu Arg Thr Asn Val Val
250          85          90          95
252 Ala Arg Ala Gly Val Arg Leu Ser Met Asp Gln Gln Ala His Gly Leu
253          100          105          110
255 Asp Arg Arg Gly Pro Phe Arg Arg Trp His Glu Thr Leu Leu Lys Leu
256          115          120          125
258 Leu Asn Gln Ala Lys Glu Asn Gly Glu Leu Leu Pro His Val Val Thr
259          130          135          140
261 Thr Asp Ser Ala Asp Leu Tyr Val Gly Thr Phe Ala Gly Ile Gln Val
262 145          150          155          160
264 Val Ser Gln Thr Val Ser Asp Tyr Gln Asp Leu Glu His Arg Tyr Ala
265          165          170          175
267 Leu Leu Gln Lys His Ile Leu Pro Ala Ile Ala Val Pro Ser Val Leu
268          180          185          190
270 Ala Ala Leu Asp Leu Ser Glu Glu Arg Gly Ala Arg Leu Ala Ala Glu
271          195          200          205
273 Leu Ala Pro Thr Gly Lys Asp
274          210          215

```

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003 *Amc*  
TIME: 11:06:00

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw

```

277 <210> SEQ ID NO: 17
278 <211> LENGTH: 313
279 <212> TYPE: PRT
280 <213> ORGANISM: Streptomyces coelicolor
282 <400> SEQUENCE: 17
283 Met Pro Glu Ala Val Val Leu Ile Asn Ser Ala Ser Asp Ala Asn Ser
284   1           5           10           15
286 Ile Glu Gln Thr Ala Leu Pro Val Pro Met Ala Leu Val His Arg Thr
287           20           25           30
289 Arg Val Gln Asp Ala Phe Pro Val Ser Trp Ile Pro Lys Gly Gly Asp
290           35           40           45
292 Arg Phe Ser Val Thr Ala Val Leu Pro His Asp His Pro Phe Phe Ala
293           50           55           60
295 Pro Val His Gly Asp Arg His Asp Pro Leu Leu Ile Ala Glu Thr Leu
296           65           70           75           80
298 Arg Gln Ala Ala Met Leu Val Phe His Ala Gly Tyr Gly Val Pro Val
299           85           90           95
301 Gly Tyr His Phe Leu Met Thr Leu Asp Tyr Thr Cys His Leu Asp His
302           100          105          110
304 Leu Gly Val Ser Gly Glu Val Ala Glu Leu Glu Val Glu Val Ala Cys
305           115          120          125
307 Ser Gln Leu Lys Phe Arg Gly Gly Gln Pro Val Gln Gly Gln Val Asp
308           130          135          140
310 Trp Ala Val Arg Arg Ala Gly Arg Leu Ala Ala Thr Gly Thr Ala Thr
311          145          150          155          160
313 Thr Arg Phe Thr Ser Pro Gln Val Tyr Arg Arg Met Arg Gly Asp Phe
314           165          170          175
316 Ala Thr Pro Thr Ala Ser Val Pro Gly Thr Ala Pro Val Pro Ala Ala
317           180          185          190
319 Arg Ala Gly Arg Thr Arg Asp Glu Asp Val Val Leu Ser Ala Ser Ser
320           195          200          205
322 Gln Gln Asp Thr Trp Arg Leu Arg Val Asp Thr Ser His Pro Thr Leu
323           210          215          220
325 Phe Gln Arg Pro Asn Asp His Val Pro Gly Met Leu Leu Leu Glu Ala
326          225          230          235          240
328 Ala Arg Gln Ala Ala Cys Leu Val Thr Gly Pro Ala Pro Phe Val Pro
329           245          250          255
331 Ser Ile Gly Gly Thr Arg Phe Val Arg Tyr Ala Glu Phe Asp Ser Pro
332           260          265          270
334 Cys Trp Ile Gln Ala Thr Val Arg Pro Gly Pro Ala Ala Gly Leu Thr
335           275          280          285
337 Thr Val Arg Val Thr Gly His Gln Asp Gly Ser Leu Val Phe Leu Thr
338           290          295          300
340 Thr Leu Ser Gly Pro Ala Phe Ser Gly
341          305          310
344 <210> SEQ ID NO: 18
345 <211> LENGTH: 262
346 <212> TYPE: PRT
347 <213> ORGANISM: Streptomyces coelicolor

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/017,471A

DATE: 03/14/2003 *Rmc*

TIME: 11:06:01

Input Set : A:\p02329.app

Output Set: N:\CRF4\09282005\J017471A.raw